

Computer Science 212

Object-Oriented Programming in Java

Lab 25

Aim: Recursion Practice.

Create a class called Lab25, and put in the following variables and a main method.

```
public class Lab25 {  
  
    public static void main (String[] args) {  
        int[] intArray = {3,5,9,4,10,33,12,19,4,16,23,30};  
  
        insert statements to call the methods below and print the results from each call.  
  
    }  
}
```

Write and run the following recursive methods from within the main method.

```
public static int largest(int[] myArray, int index) {
```

The largest number in the array is the larger of the first number in the array, and the largest number in the rest of the array.

```
public static int sum (int[] myArray, int index) {
```

The sum of the numbers in the array is the first number plus the sum of the rest of the numbers in the array.

```
public static Boolean isSorted(int[] myArray, int index) {
```

The array is sorted if the first number in the array is less than or equal to the second number in the array, and the rest of the array is sorted.